

REMARKS

Claims 1, 11, 13, 16, and 20-24 are or have been formally cancelled. Accordingly, Claims 2-10, 12, 14-15, 17-19, 25 and 26 are currently pending. Reconsideration and allowance of the pending claims are respectfully requested.

Interview Summaries

On October 11, 2007, Applicant's representative, Derek C. Stettner, and Examiner Tung T. Vo conducted an interview. During the interview, the Applicant presented arguments regarding why the claims were patentable over the Ohsawa reference. In addition, the Examiner also asked for additional information regarding how the bus information is integrated with the original video signal. As a consequence, Applicant arranged for a supplemental interview so that the Examiner could speak with one of the inventors.

On October 30, 2007, Applicant's representative, Derek C. Stettner, and inventor Michael James Knee conducted a telephonic interview with Examiner Tung T. Vo. During the interview, Mr. Knee explained how the coding decisions are embedded or integrated in the original video signal as is described, for example, with respect to one embodiment on page 5, line 30 through page 6, line 3 of Applicant's specification. As the Examiner noted in his interview summary dated November 2, 2007, as a result of the discussions during the interview, Applicant proposed amending the claims to clarify the relationship between the coding decisions and the input video signal. Such amendments are presented herein.

Claim Rejections

Claims 2-10, 12, 14, 15, 17-19, 25 and 26 were presented for examination and all claims were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,990,955, issued to Koz ("Koz").

The Koz Reference:

With due respect, it seems that the Examiner has misconstrued certain aspects of Koz. Koz discloses a conventional compression encoding system. For example, the encoding system

of Koz receives uncompressed video at its input 112 and outputs a compressed bitstream at 118. Koz utilizes two encoders which operate on successive GOP's of the incoming video. The use of two encoders enables Koz to provide a two-passing coding system within a single encoding system.

Broken down in greater detail, the first encoder 104 in Koz computes statistical measures in *ss1*. These may include “bitrate, average bitrate over a period, motion vector summations over period and alike.” *Col 18, lines 16-18*. These statistical measures are passed to the second encoder 114 and to a filter F1 which operates on the incoming video.

It is important to note that, while the first encoder 104 will take coding decisions, these are not the coding decisions employed in the second encoder 114. For example, the second encoder 114 does not “slave” to the first encoder 104. The coding decisions taken by the first encoder 104 suffer from all the disadvantages that Koz enumerates in the prior art. However, Koz discloses taking statistics from the first encoder 104 and to use these statistics to enable the second encoder 114 to make better (and therefore different) coding decisions.

A number of key aspects of the claims can thus be identified as distinguishable from Koz:

1. Koz does not output coding decisions; it is a traditional encoder in the sense that it receives an uncompressed video signal and outputs a compressed bitstream.
2. There is no disclosure in Koz of the input video signal being output with no compression processing.
3. Koz does not disclose passage along a video pathway of both the unprocessed input video signal and the coding decisions that can be used downstream to encode that video signal.

Claims 9, 12, 14, 15, 25, and 26:

Additionally, in relation to the rejection of claims 9, 12, 14, 15, 25 and 26, the Examiner has attempted to identify as block 110 in Figure 6 of Koz as the claimed elements for receiving coding decisions and outputting processed coding decisions. The Examiner further asserts that it

would have been obvious to modify blocks 109 and 110 to output the video input signal without processing.

First, block 110 of Koz does not receive coding decisions from the encoder 104, it receives statistical measures, as described above. The core concept of Koz is that the coding decisions made in the first encoder 104 are flawed and are not to be used. If the decisions taken by the first encoder 104 were used, all the advantages offered by Koz would be lost. What block 110 in fact receives is statistical information. This statistical information is then passed to the second encoder 114, enabling that encoder to take better informed coding decisions.

Second, there is no motivation for one of skill in the art to output the input video signal from Koz. Such a configuration does not make technical sense. The Examiner's assertion that this would represent an improvement over the prior art is, with respect, simply not understood. While Koz may refer to dynamically controlling compression, this dynamic control is in the context of improving a single encoding system. Moreover, Koz does not teach that the output of block 110 should (or could) be output with the input video signal. Koz also does not disclose the output of block 110 being integrated with the input video signal. Finally, it is reaffirmed that the output of block 110 is not coding decisions.

The objective and the operation of the claimed invention are very different from the disclosure of Koz.

In embodiments of the invention, the input video signal is received, coding decisions for compressing that video signal are derived and both the input video signal and the coding decisions for compressing it, are output on a video pathway. That video pathway may form part of a distribution network over which video content is stored and transmitted using a wide variety of known technologies. A downstream encoder receiving the uncompressed video and the represented coding decisions is then able to compress the video, "slaving" to the decisions taken upstream. This capability, provided by the claimed invention, of distributing uncompressed video but retaining control over a downstream encoding process offers real commercial benefits. This capability is not provided by the teaching of Koz and there is not obvious modification of Koz that can provide that capability.

For example, with specific respect to claims 14 and 15, Koz clearly does not teach or suggest enabling a downstream encoder to slave to coding decisions and compression encode an input signal at a bit rate determined by the coding decisions. The output of block 110 of Koz is simply not capable of this function, as described above.

Claims 2-8, 10, and 17-19:

Claims 2-8, 10, and 17-19 depend from claims 9,12, 14, 15, 25, and 26 and are therefore allowable for at least the same reasons, and for other reasons not specifically addressed herein.

CONCLUSION

In light of the above, Applicant respectfully requests reconsideration and allowance of the pending claims. Applicant also requests that the Examiner telephone the Applicant's attorney if there are issues that can be addressed through a telephonic conference.

Respectfully submitted,



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